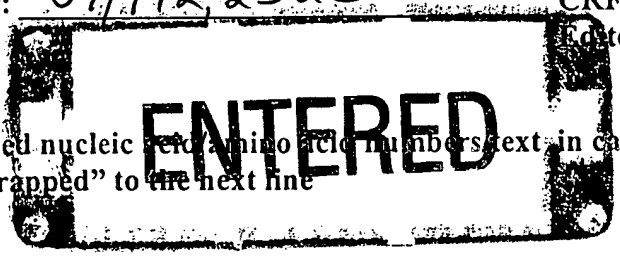
1600 #17

CRF Errors Edited by the STIC Systems Branch

Serial Number: 09/942,252C CRF Edit Date: 8/4/04

Edited by: [signature]



___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

___ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

_____

___ Moved responses to same line as heading/numeric identifier, specifically:

_____

✓ Other: Sequence 16 - corrected amino acid numbering

_____

_____

Revised 09/09/2003

1600

RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 16:05:17

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08042004\I942252C.raw**

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     3 <110> APPLICANT: Messier, Walter
     4       Sikela, James M
     6 <120> TITLE OF INVENTION: Methods to Identify Polynucleotide and Polypeptide
     7       Sequences Which May Be Associated with Physiological
     8       and Medical Conditions
    10 <130> FILE REFERENCE: GENO 200.2/CIP
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/942,252C
C--> 13 <141> CURRENT FILING DATE: 2001-08-28
    15 <150> PRIOR APPLICATION NUMBER: 09/591,435
    16 <151> PRIOR FILING DATE: 2000-06-09
    18 <150> PRIOR APPLICATION NUMBER: 09/240,915
    19 <151> PRIOR FILING DATE: 1999-01-29
    21 <150> PRIOR APPLICATION NUMBER: 60/073,263
    22 <151> PRIOR FILING DATE: 1998-01-30
    24 <150> PRIOR APPLICATION NUMBER: 60/098,987
    25 <151> PRIOR FILING DATE: 1998-09-02
    27 <160> NUMBER OF SEQ ID NOS: 30
    29 <170> SOFTWARE: PatentIn Ver. 2.0
    31 <210> SEQ ID NO: 1
    32 <211> LENGTH: 1518
    33 <212> TYPE: DNA
    34 <213> ORGANISM: Homo sapiens
    36 <400> SEQUENCE: 1
    37 cagacatctg tgtccccctc aaaagtcatc ctgccccggg gaggctccgt gctggtgaca 60
    39 tgcagcacct cctgtgacca gcccaagttg ttgggcatag agaccccgtt gcctaaaaag 120
    41 gagttgctcc tgcctgggaa caaccggaag gtgtatgaac tgagcaatgt gcaagaagat 180
    43 agccaaccaa tgtgctattc aaactgccct gatgggcagt caacagctaa aaccttcctc 240
    45 accgtgtact ggactccaga acgggtggaa ctggcacccc tcccctcttg gcagccagtg 300
    47 ggcaagaacc ttaccctacg ctgccaggtg gagggtgggg caccccgggc caacctcacc 360
    49 gtggtgctgc tccgtgggga gaaggagctg aaacgggagc cagctgtggg ggagcccgct 420
    51 gaggtcacga ccacggtgct ggtgaggaga gatcaccatg gagccaattt ctcgtgccgc 480
    53 actgaactgg acctgcggcc ccaagggctg gagctgtttg agaacacctc ggccccctac 540
    55 cagctccaga cctttgtcct gccagcgact cccccacaac ttgtcagccc ccgggtccta 600
    57 gaggtggaca cgcaggggac cgtggtctgt tccctggacg ggctgttccc agtctcggag 660
    59 gcccaggtcc acctggcact gggggaccag aggttgaacc ccacagtcac ctatggcaac 720
    61 gactccttct cggccaaggc ctcagtcagt gtgaccgcag aggacgaggg cacccagcgg 780
    63 ctgacgtgtg cagtaatact ggggaaccag agccaggaga cactgcagac agtgaccatc 840
    65 tacagctttc cggcgcccaa cgtgattctg acgaagccag aggtctcaga agggaccgag 900
    67 gtgacagtga agtgtgaggc ccaccctaga gccaaggtga cgctgaatgg ggttccagcc 960
    69 cagccactgg gcccgagggc ccagctcctg ctgaaggcca ccccagagga caacgggcgc 1020
    71 agcttctcct gctctgcaac cctggaggtg gccggccagc ttatacacaa gaaccagacc 1080
    73 cgggagcttc gtgtcctgta tggcccccga ctggacgaga gggattgtcc gggaaactgg 1140
    75 acgtggccag aaaattccca gcagactcca atgtgccagg cttgggggaa cccattgccc 1200
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RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 16:05:17

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08042004\I942252C.raw**

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77 gagctcaagt gtctaaagga tggcactttc ccactgccca tcggggaatc agtgactgtc 1260
79 actcgagatc ttgagggcac ctacctctgt cgggccagga gcactcaagg ggaggtcacc 1320
81 cgcgaggtga ccgtgaatgt gctctccccc cggtatgaga ttgtcatcat cactgtggta 1380
83 gcagccgcag tcataatggg cactgcaggc ctcagcacgt acctctataa ccgccagcgg 1440
85 aagatcaaga aatacagact acaacaggcc caaaaaggga cccccatgaa accgaacaca 1500
87 caagccacgc ctccctga                                              1518
90 <210> SEQ ID NO: 2
91 <211> LENGTH: 1518
92 <212> TYPE: DNA
93 <213> ORGANISM: Pan troglodytes
95 <220> FEATURE:
96 <221> NAME/KEY: CDS
97 <222> LOCATION: (1)..(1518)
99 <400> SEQUENCE: 2
100 cag aca tct gtg tcc ccc cca aaa gtc atc ctg ccc cgg gga ggc tcc   48
101 Gln Thr Ser Val Ser Pro Pro Lys Val Ile Leu Pro Arg Gly Gly Ser
102   1               5                  10                  15
104 gtg cag gtg aca tgc agc acc tcc tgt gac cag ccc gac ttg ttg ggc   96
105 Val Gln Val Thr Cys Ser Thr Ser Cys Asp Gln Pro Asp Leu Leu Gly
106             20                  25                  30
108 ata gag acc ccg ttg cct aaa aag gag ttg ctt ctg ggt ggg aac aac   144
109 Ile Glu Thr Pro Leu Pro Lys Lys Glu Leu Leu Leu Gly Gly Asn Asn
110         35                  40                  45
112 tgg aag gtg tat gaa ctg agc aat gtg caa gaa gat agc caa cca atg   192
113 Trp Lys Val Tyr Glu Leu Ser Asn Val Gln Glu Asp Ser Gln Pro Met
114     50                  55                  60
116 tgc tat tca aac tgc cct gat ggg cag tca aca gct aaa acc ttc ctc   240
117 Cys Tyr Ser Asn Cys Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu
118 65                  70                  75                  80
120 acc gtg tac tgg act cca gaa cgg gtg gaa ctg gca ccc ctc ccc tct   288
121 Thr Val Tyr Trp Thr Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Ser
122                 85                  90                  95
124 tgg cag cca gtg ggc aag gac ctt acc cta cgc tgc cag gtg gag ggt   336
125 Trp Gln Pro Val Gly Lys Asp Leu Thr Leu Arg Cys Gln Val Glu Gly
126             100                 105                 110
128 ggg gca ccc cgg gcc aac ctc acc gtg gtg ctg ctc cgt ggg gag aag   384
129 Gly Ala Pro Arg Ala Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys
130         115                 120                 125
132 gag ctg aaa cgg gag cca gct gtg ggg gag ccc gct gag gtc acg acc   432
133 Glu Leu Lys Arg Glu Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr
134     130                 135                 140
136 acg gtg ctg gtg gag aga gat cac cat gga gcc aat ttc tcg tgc cgc   480
137 Thr Val Leu Val Glu Arg Asp His His Gly Ala Asn Phe Ser Cys Arg
138 145                 150                 155                 160
140 act gaa ctg gac ctg cgg ccc caa ggg ctg cag ctg ttt gag aac acc   528
141 Thr Glu Leu Asp Leu Arg Pro Gln Gly Leu Gln Leu Phe Glu Asn Thr
142                 165                 170                 175
144 tcg gcc ccc cac cag ctc caa acc ttt gtc ctg cca gcg act ccc cca   576
145 Ser Ala Pro His Gln Leu Gln Thr Phe Val Leu Pro Ala Thr Pro Pro
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RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 16:05:17

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08042004\I942252C.raw**

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146                 180                 185                 190
148 caa ctt gtc agc ccc cgg gtc cta gag gtg gac acg cag ggg acc gtg   624
149 Gln Leu Val Ser Pro Arg Val Leu Glu Val Asp Thr Gln Gly Thr Val
150         195                 200                 205
152 gtc tgt tcc ctg gac ggg ctg ttc cca gtc tcg gag gcc cag gtc cac   672
153 Val Cys Ser Leu Asp Gly Leu Phe Pro Val Ser Glu Ala Gln Val His
154     210                 215                 220
156 ctg gca ctg ggg gac cag agg ttg aac ccc aca gtc acc tat ggc aat   720
157 Leu Ala Leu Gly Asp Gln Arg Leu Asn Pro Thr Val Thr Tyr Gly Asn
158 225                 230                 235                 240
160 gac tcc ttc tcg gcc aag gcc tca gtc agt gtg acc gca gag gac gag   768
161 Asp Ser Phe Ser Ala Lys Ala Ser Val Ser Val Thr Ala Glu Asp Glu
162                 245                 250                 255
164 ggc acc cag cgg ctg acg tgt gca gta ata ctg ggg aac cag agc cgg   816
165 Gly Thr Gln Arg Leu Thr Cys Ala Val Ile Leu Gly Asn Gln Ser Arg
166             260                 265                 270
168 gag aca ctg cag aca gtg acc atc tac agc ttt ccg gcg ccc aac gtg   864
169 Glu Thr Leu Gln Thr Val Thr Ile Tyr Ser Phe Pro Ala Pro Asn Val
170         275                 280                 285
172 att ctg acg aag cca gag gtc tca gaa ggg acc gag gtg aca gtg aag   912
173 Ile Leu Thr Lys Pro Glu Val Ser Glu Gly Thr Glu Val Thr Val Lys
174     290                 295                 300
176 tgt gag gcc cac cct aga gcc aag gtg acg ctg aat ggg gtt cca gcc   960
177 Cys Glu Ala His Pro Arg Ala Lys Val Thr Leu Asn Gly Val Pro Ala
178 305                 310                 315                 320
180 cag cca gtg ggc ccg agg gtc cag ctc ctg ctg aag gcc acc cca gag  1008
181 Gln Pro Val Gly Pro Arg Val Gln Leu Leu Leu Lys Ala Thr Pro Glu
182                 325                 330                 335
184 gac aac ggg cgc agc ttc tcc tgc tct gca acc ctg gag gtg gcc ggc  1056
185 Asp Asn Gly Arg Ser Phe Ser Cys Ser Ala Thr Leu Glu Val Ala Gly
186             340                 345                 350
188 cag ctt ata cac aag aac cag acc cgg gag ctt cgt gtc ctg tat ggc  1104
189 Gln Leu Ile His Lys Asn Gln Thr Arg Glu Leu Arg Val Leu Tyr Gly
190         355                 360                 365
192 ccc cga ctg gac gag agg gat tgt ccg gga aac tgg acg tgg cca gaa  1152
193 Pro Arg Leu Asp Glu Arg Asp Cys Pro Gly Asn Trp Thr Trp Pro Glu
194     370                 375                 380
196 aat tcc cag cag act cca atg tgc cag gct tcg ggg aac cca ttg ccc  1200
197 Asn Ser Gln Gln Thr Pro Met Cys Gln Ala Ser Gly Asn Pro Leu Pro
198 385                 390                 395                 400
200 gag ctc aag tgt cta aag gat ggc act ttc cca ctg ccc gtc ggg gaa  1248
201 Glu Leu Lys Cys Leu Lys Asp Gly Thr Phe Pro Leu Pro Val Gly Glu
202                 405                 410                 415
204 tca gtg act gtc act cga gat ctt gag ggc acc tac ctc tgt cgg gcc  1296
205 Ser Val Thr Val Thr Arg Asp Leu Glu Gly Thr Tyr Leu Cys Arg Ala
206             420                 425                 430
208 agg agc act caa ggg gag gtc acc cgc aag gtg acc gtg aat gtg ctc  1344
209 Arg Ser Thr Gln Gly Glu Val Thr Arg Lys Val Thr Val Asn Val Leu
210         435                 440                 445
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RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 16:05:17

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08042004\I942252C.raw**

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212 tcc ccc cgg tat gag att gtc atc atc act gtg gta gca gcc gca gtc   1392
213 Ser Pro Arg Tyr Glu Ile Val Ile Ile Thr Val Val Ala Ala Ala Val
214     450                 455                 460
216 ata atg ggc act gca ggc ctc agc acg tac ctc tat aac cgc cag cgg   1440
217 Ile Met Gly Thr Ala Gly Leu Ser Thr Tyr Leu Tyr Asn Arg Gln Arg
218 465                 470                 475                 480
220 aag atc agg aaa tac aga cta caa cag gct caa aaa ggg acc ccc atg   1488
221 Lys Ile Arg Lys Tyr Arg Leu Gln Gln Ala Gln Lys Gly Thr Pro Met
222                 485                 490                 495
224 aaa ccg aac aca caa gcc acg cct ccc tga                         1518
225 Lys Pro Asn Thr Gln Ala Thr Pro Pro
226             500                 505
229 <210> SEQ ID NO: 3
230 <211> LENGTH: 505
231 <212> TYPE: PRT
232 <213> ORGANISM: Pan troglodytes
234 <400> SEQUENCE: 3
235 Gln Thr Ser Val Ser Pro Pro Lys Val Ile Leu Pro Arg Gly Gly Ser
236   1               5                  10                  15
238 Val Gln Val Thr Cys Ser Thr Ser Cys Asp Gln Pro Asp Leu Leu Gly
239             20                  25                  30
241 Ile Glu Thr Pro Leu Pro Lys Lys Glu Leu Leu Leu Gly Gly Asn Asn
242         35                  40                  45
244 Trp Lys Val Tyr Glu Leu Ser Asn Val Gln Glu Asp Ser Gln Pro Met
245     50                  55                  60
247 Cys Tyr Ser Asn Cys Pro Asp Gly Gln Ser Thr Ala Lys Thr Phe Leu
248 65                  70                  75                  80
250 Thr Val Tyr Trp Thr Pro Glu Arg Val Glu Leu Ala Pro Leu Pro Ser
251                 85                  90                  95
253 Trp Gln Pro Val Gly Lys Asp Leu Thr Leu Arg Cys Gln Val Glu Gly
254             100                 105                 110
256 Gly Ala Pro Arg Ala Asn Leu Thr Val Val Leu Leu Arg Gly Glu Lys
257         115                 120                 125
259 Glu Leu Lys Arg Glu Pro Ala Val Gly Glu Pro Ala Glu Val Thr Thr
260     130                 135                 140
262 Thr Val Leu Val Glu Arg Asp His His Gly Ala Asn Phe Ser Cys Arg
263 145                 150                 155                 160
265 Thr Glu Leu Asp Leu Arg Pro Gln Gly Leu Gln Leu Phe Glu Asn Thr
266                 165                 170                 175
268 Ser Ala Pro His Gln Leu Gln Thr Phe Val Leu Pro Ala Thr Pro Pro
269             180                 185                 190
271 Gln Leu Val Ser Pro Arg Val Leu Glu Val Asp Thr Gln Gly Thr Val
272         195                 200                 205
274 Val Cys Ser Leu Asp Gly Leu Phe Pro Val Ser Glu Ala Gln Val His
275     210                 215                 220
277 Leu Ala Leu Gly Asp Gln Arg Leu Asn Pro Thr Val Thr Tyr Gly Asn
278 225                 230                 235                 240
280 Asp Ser Phe Ser Ala Lys Ala Ser Val Ser Val Thr Ala Glu Asp Glu
281                 245                 250                 255
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RAW SEQUENCE LISTING DATE: 08/04/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 16:05:17

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08042004\I942252C.raw**

```
283 Gly Thr Gln Arg Leu Thr Cys Ala Val Ile Leu Gly Asn Gln Ser Arg
284             260                 265                 270
286 Glu Thr Leu Gln Thr Val Thr Ile Tyr Ser Phe Pro Ala Pro Asn Val
287         275                 280                 285
289 Ile Leu Thr Lys Pro Glu Val Ser Glu Gly Thr Glu Val Thr Val Lys
290     290                 295                 300
292 Cys Glu Ala His Pro Arg Ala Lys Val Thr Leu Asn Gly Val Pro Ala
293 305                 310                 315                 320
295 Gln Pro Val Gly Pro Arg Val Gln Leu Leu Leu Lys Ala Thr Pro Glu
296                 325                 330                 335
298 Asp Asn Gly Arg Ser Phe Ser Cys Ser Ala Thr Leu Glu Val Ala Gly
299             340                 345                 350
301 Gln Leu Ile His Lys Asn Gln Thr Arg Glu Leu Arg Val Leu Tyr Gly
302         355                 360                 365
304 Pro Arg Leu Asp Glu Arg Asp Cys Pro Gly Asn Trp Thr Trp Pro Glu
305     370                 375                 380
307 Asn Ser Gln Gln Thr Pro Met Cys Gln Ala Ser Gly Asn Pro Leu Pro
308 385                 390                 395                 400
310 Glu Leu Lys Cys Leu Lys Asp Gly Thr Phe Pro Leu Pro Val Gly Glu
311                 405                 410                 415
313 Ser Val Thr Val Thr Arg Asp Leu Glu Gly Thr Tyr Leu Cys Arg Ala
314             420                 425                 430
316 Arg Ser Thr Gln Gly Glu Val Thr Arg Lys Val Thr Val Asn Val Leu
317         435                 440                 445
319 Ser Pro Arg Tyr Glu Ile Val Ile Ile Thr Val Val Ala Ala Ala Val
320     450                 455                 460
322 Ile Met Gly Thr Ala Gly Leu Ser Thr Tyr Leu Tyr Asn Arg Gln Arg
323 465                 470                 475                 480
325 Lys Ile Arg Lys Tyr Arg Leu Gln Gln Ala Gln Lys Gly Thr Pro Met
326                 485                 490                 495
328 Lys Pro Asn Thr Gln Ala Thr Pro Pro
329             500                 505
332 <210> SEQ ID NO: 4
333 <211> LENGTH: 1515
334 <212> TYPE: DNA
335 <213> ORGANISM: Gorilla gorilla
337 <400> SEQUENCE: 4
338 cagacatctg tgtccccccc aaaagtcatc ctgccccggg gaggctccgt gctggtgaca 60
340 tgcagcacct cctgtgacca gcccaccttg ttgggcatag agaccccgtt gcctaaaaag 120
342 gagttgctcc tgcttgggaa caaccagaag gtgtatgaac tgagcaatgt gcaagaagat 180
344 agccaaccaa tgtgttattc aaactgccct gatgggcagt caacagctaa aaccttcctc 240
346 accgtgtact ggactccaga acgggtggaa ctggcacccc tcccctcttg gcagccagtg 300
348 ggcaaggacc ttaccctacg ctgccaggtg gagggtgggg caccccgggc caacctcatc 360
350 gtggtgctgc tccgtgggga ggaggagctg aaacgggagc cagctgtggg ggagcccgcc 420
352 gaggtcacga ccacggtgcc ggtggagaaa gatcaccatg gagccaattt cttgtgccgc 480
354 actgaactgg acctgcggcc ccaagggctg aagctgtttg agaacacctc ggccccctac 540
356 cagctccaaa cctttgtcct gccagcgact cccccacaac ttgtcagccc tcgggtccta 600
358 gaggtggaca cgcaggggac tgtggtctgt tccctggacg ggctgttccc agtctcggag 660
360 gcccaggtcc acctggcact gggggaccag aggttgaacc ccacagtcac ctatggcaac 720
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VERIFICATION SUMMARY DATE: 08/04/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 16:05:18

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\08042004\I942252C.raw**

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

1600

RAW SEQUENCE LISTING DATE: 08/02/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 15:05:37

Input Set : **A:\09942252Sequence Listing.txt**
Output Set: **N:\CRF4\08022004\I942252C.raw**

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      4       Sikela, James M
      6 <120> TITLE OF INVENTION: Methods to Identify Polynucleotide and Polypeptide
      7       Sequences Which May Be Associated with Physiological
      8       and Medical Conditions
     10 <130> FILE REFERENCE: GENO 200.2/CIP
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/942,252C
C--> 13 <141> CURRENT FILING DATE: 2001-08-28
     15 <150> PRIOR APPLICATION NUMBER: 09/591,435
     16 <151> PRIOR FILING DATE: 2000-06-09
     18 <150> PRIOR APPLICATION NUMBER: 09/240,915
     19 <151> PRIOR FILING DATE: 1999-01-29
     21 <150> PRIOR APPLICATION NUMBER: 60/073,263
     22 <151> PRIOR FILING DATE: 1998-01-30
     24 <150> PRIOR APPLICATION NUMBER: 60/098,987
     25 <151> PRIOR FILING DATE: 1998-09-02
     27 <160> NUMBER OF SEQ ID NOS: 30
     29 <170> SOFTWARE: PatentIn Ver. 2.0
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Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

p.4

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   1466 <210> SEQ ID NO: 16
   1467 <211> LENGTH: 1207
   1468 <212> TYPE: PRT
   1469 <213> ORGANISM: Homo sapiens
   1471 <400> SEQUENCE: 16
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   1473   1               5                  10                  15
   1475 Asn Leu Leu Gln Cys Leu Ala Gln Cys Ala Glu Val Thr Pro Tyr Leu
   1476              20                  25                  30
   1478 Leu Val Met Glu Phe Cys Pro Leu Gly Asp Leu Lys Gly Tyr Leu Arg
   1479          35                  40                  45
   1481 Ser Cys Arg Val Ala Glu Ser Met Ala Pro Asp Pro Arg Thr Leu Gln
   1482      50                  55                  60
   1484 Arg Met Ala Cys Glu Val Ala Cys Gly Val Leu His Leu His Arg Asn
   1485  65                  70                  75                  80
   1487 Asn Phe Val His Ser Asp Leu Ala Leu Arg Asn Cys Leu Leu Thr Ala
   1488                  85                  90                  95
   1490 Asp Leu Thr Val Lys Ile Gly Asp Tyr Gly Leu Ala His Cys Lys Tyr
   1491              100                 105                 110
   1493 Arg Glu Asp Tyr Phe Val Thr Ala Asp Gln Leu Trp Val Pro Leu Arg
   1494          115                 120                 125
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RAW SEQUENCE LISTING DATE: 08/02/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 15:05:37

Input Set : **A:\09942252Sequence Listing.txt**
Output Set: **N:\CRF4\08022004\I942252C.raw**

```
1496 Trp Ile Ala Pro Glu Leu Val Asp Glu Val His Ser Asn Leu Leu Val
1497     130                 135                 140
1499 Val Asp Gln Thr Lys Ser Gly Asn Val Trp Ser Leu Gly Val Thr Ile
1500 145                 150                 155                 160
1502 Trp Glu Leu Phe Glu Leu Gly Thr Gln Pro Tyr Pro Gln His Ser Asp
1503                 165                 170                 175
1505 Gln Gln Val Leu Ala Tyr Thr Val Arg Glu Gln Gln Leu Lys Leu Pro
1506             180                 185                 190
1508 Lys Pro Gln Leu Gln Leu Thr Leu Ser Asp Arg Trp Tyr Glu Val Met
1509         195                 200                 205
1511 Gln Phe Cys Trp Leu Gln Pro Glu Gln Arg Pro Thr Ala Glu Glu Val
1512     210                 215                 220
1514 His Leu Leu Leu Ser Tyr Leu Cys Ala Lys Gly Ala Thr Glu Ala Glu
1515 225                 230                 235                 240
1517 Glu Glu Phe Glu Arg Arg Trp Arg Ser Leu Arg Pro Gly Gly Gly Gly
1518                 245                 250                 255
1520 Val Gly Pro Gly Pro Gly Ala Ala Gly Pro Met Leu Gly Gly Val Val
1521             260                 265                 270
1523 Glu Leu Ala Ala Ala Ser Ser Phe Pro Leu Leu Glu Gln Phe Ala Gly
1524         275                 280                 285
1526 Asp Gly Phe His Ala Asp Gly Asp Asp Val Leu Thr Val Thr Glu Thr
1527     290                 295                 300
1529 Ser Arg Gly Leu Asn Phe Glu Tyr Lys Trp Glu Ala Gly Arg Gly Ala
1530 305                 310                 315                 320
1532 Glu Ala Phe Pro Ala Thr Leu Ser Pro Gly Arg Thr Ala Arg Leu Gln
1533                 325                 330                 335
1535 Glu Leu Cys Ala Pro Asp Gly Ala Pro Pro Gly Val Val Pro Val Leu
1536             340                 345                 350
1538 Ser Ala His Ser Pro Ser Leu Gly Ser Glu Tyr Phe Ile Arg Leu Glu
1539         355                 360                 365
1541 Glu Ala Ala Pro Ala Ala Gly His Asp Pro Asp Cys Ala Gly Cys Ala
1542     370                 375                 380
1544 Pro Ser Pro Pro Ala Thr Ala Asp Gln Asp Asp Asp Ser Asp Gly Ser
1545 385                 390                 395                 400
1547 Thr Ala Ala Ser Leu Ala Met Glu Pro Leu Leu Gly His Gly Pro Pro
1548                 405                 410                 415
1550 Val Asp Val Pro Trp Gly Arg Gly Asp His Tyr Pro Arg Arg Ser Leu
1551             420                 425                 430
1553 Ala Arg Asp Pro Leu Cys Pro Ser Arg Ser Pro Ser Pro Ser Ala Gly
1554         435                 440                 445
1556 Pro Leu Ser Leu Ala Glu Gly Gly Ala Glu Asp Ala Asp Trp Gly Val
1557     450                 455                 460
1559 Ala Ala Phe Cys Pro Ala Phe Phe Glu Asp Pro Leu Gly Thr Ser Pro
1560 465                 470                 475                 480
1562 Leu Gly Ser Ser Gly Ala Pro Pro Leu Pro Leu Thr Gly Glu Asp Glu
1563                 485                 490                 495
1565 Leu Glu Glu Val Gly Ala Arg Arg Ala Ala Gln Arg Gly His Trp Arg
1566             500                 505                 510
1568 Ser Asn Val Ser Ala Asn Asn Asn Ser Gly Ser Arg Cys Pro Glu Ser
```

RAW SEQUENCE LISTING DATE: 08/02/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 15:05:37

Input Set : **A:\09942252Sequence Listing.txt**
Output Set: **N:\CRF4\08022004\I942252C.raw**

```
1569          515                 520                 525
1571 Trp Asp Pro Val Ser Ala Gly Cys His Ala Glu Gly Cys Pro Ser Pro
1572      530                 535                 540
1574 Lys Gln Thr Pro Arg Ala Ser Pro Glu Pro Gly Tyr Pro Gly Glu Pro
1575 545                 550                 555                 560
1577 Leu Leu Gly Leu Gln Ala Ala Ser Ala Gln Glu Pro Gly Cys Cys Pro
1578                 565                 570                 575
1580 Gly Leu Pro His Leu Cys Ser Ala Gln Gly Leu Ala Pro Ala Pro Cys
1581             580                 585                 590
1583 Leu Val Thr Pro Ser Trp Thr Glu Thr Ala Ser Ser Gly Gly Asp His
1584          595                 600                 605
1586 Pro Gln Ala Glu Pro Lys Leu Ala Thr Glu Ala Glu Gly Thr Thr Gly
1587      610                 615                 620
1589 Pro Arg Leu Pro Leu Pro Ser Val Pro Ser Pro Ser Gln Glu Gly Ala
1590 625                 630                 635                 640
1592 Pro Leu Pro Ser Glu Glu Ala Ser Ala Pro Asp Ala Pro Asp Ala Leu
1593                 645                 650                 655
1595 Pro Asp Ser Pro Thr Pro Ala Thr Gly Gly Glu Val Ser Ala Ile Lys
1596             660                 665                 670
1598 Leu Ala Ser Ala Leu Asn Gly Ser Ser Ser Ser Pro Glu Val Glu Ala
1599          675                 680                 685
1601 Pro Ser Ser Glu Asp Glu Asp Thr Ala Glu Ala Thr Ser Gly Ile Phe
1602      690                 695                 700
1604 Thr Asp Thr Ser Ser Asp Gly Leu Gln Ala Arg Arg Pro Asp Val Val
1605 705                 710                 715                 720
1607 Pro Ala Phe Arg Ser Leu Gln Lys Gln Val Gly Thr Pro Asp Ser Leu
1608                 725                 730                 735
1610 Asp Ser Leu Asp Ile Pro Ser Ser Ala Ser Asp Gly Gly Tyr Glu Val
1611             740                 745                 750
1613 Phe Ser Pro Ser Ala Thr Gly Pro Ser Gly Gly Gln Pro Arg Ala Leu
1614          755                 760                 765
1616 Asp Ser Gly Tyr Asp Thr Glu Asn Tyr Glu Ser Pro Glu Phe Val Leu
1617      770                 775                 780
1619 Lys Glu Ala Gln Glu Gly Cys Glu Pro Gln Ala Phe Ala Glu Leu Ala
1620 785                 790                 795                 800
1622 Ser Glu Gly Glu Gly Pro Gly Pro Glu Thr Arg Leu Ser Thr Ser Leu
1623                 805                 810                 815
1625 Ser Gly Leu Asn Glu Lys Asn Pro Tyr Arg Asp Ser Ala Tyr Phe Ser
1626             820                 825                 830
1628 Asp Leu Glu Ala Glu Ala Glu Ala Thr Ser Gly Pro Glu Lys Lys Cys
1629          835                 840                 845
1631 Gly Gly Asp Arg Ala Pro Gly Pro Glu Leu Gly Leu Pro Ser Thr Gly
1632      850                 855                 860
1634 Gln Pro Ser Glu Gln Val Cys Leu Arg Pro Gly Val Ser Gly Glu Ala
1635 865                 870                 875                 880
1637 Gln Gly Ser Gly Pro Gly Glu Val Leu Pro Pro Leu Leu Gln Leu Glu
1638                 885                 890                 895
1640 Gly Ser Ser Pro Glu Pro Ser Thr Cys Pro Ser Gly Leu Val Pro Glu
1641             900                 905                 910
```

RAW SEQUENCE LISTING DATE: 08/02/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 15:05:37

Input Set : **A:\09942252Sequence Listing.txt**
Output Set: **N:\CRF4\08022004\I942252C.raw**

```
1643 Pro Pro Glu Pro Gln Gly Pro Ala Lys Val Arg Pro Gly Pro Ser Pro
1644         915                 920                 925
1646 Ser Cys Ser Gln Phe Phe Leu Leu Thr Pro Val Pro Leu Arg Ser Glu
1647     930                 935                 940
1649 Gly Asn Ser Ser Glu Phe Gln Gly Pro Pro Gly Leu Leu Ser Gly Pro
1650 945                 950                 955                 960
1652 Ala Pro Gln Lys Arg Met Gly Gly Pro Gly Thr Pro Arg Ala Pro Leu
1653                 965                 970                 975
1655 Arg Leu Ala Leu Pro Gly Leu Pro Ala Ala Leu Glu Gly Arg Pro Glu
1656             980                 985                 990
1658 Glu Glu Glu Glu Asp Ser Glu Asp Ser Asp Glu Ser Asp Glu Glu Leu
1659         995                1000                1005
1661 Arg Cys Tyr Ser Val Gln Glu Pro Ser Glu Asp Ser Glu Glu Glu Ala
1662    1010                1015                1020
1664 Pro Ala Val Pro Val Val Val Ala Glu Ser Gln Ser Ala Arg Asn Leu
E--> 1665 025 1025          1030                1035                1040
1667 Arg Ser Leu Leu Lys Met Pro Ser Leu Leu Ser Glu Thr Phe Cys Glu
1668                1045                1050                1055
1670 Asp Leu Glu Arg Lys Lys Lys Ala Val Ser Phe Phe Asp Asp Val Thr
1671            1060                1065                1070
1673 Val Tyr Leu Phe Asp Gln Glu Ser Pro Thr Arg Glu Leu Gly Glu Pro
1674        1075                1080                1085
1676 Phe Pro Gly Ala Lys Glu Ser Pro Pro Thr Phe Leu Arg Gly Ser Pro
1677    1090                1095                1100
1679 Gly Ser Pro Ser Ala Pro Asn Arg Pro Gln Gln Ala Asp Gly Ser Pro
E--> 1680 105 1105          1110                1115                1120
1682 Asn Gly Ser Thr Ala Glu Glu Gly Gly Gly Phe Ala Trp Asp Asp Asp
1683                1125                1130                1135
1685 Phe Pro Leu Met Thr Ala Lys Ala Ala Phe Ala Met Ala Leu Asp Pro
1686            1140                1145                1150
1688 Ala Ala Pro Ala Pro Ala Ala Pro Thr Pro Thr Pro Ala Pro Phe Ser
1689        1155                1160                1165
1691 Arg Phe Thr Val Ser Pro Ala Pro Thr Ser Arg Phe Ser Ile Thr His
1692    1170                1175                1180
1694 Val Ser Asp Ser Asp Ala Glu Ser Lys Arg Gly Pro Glu Ala Gly Ala
E--> 1695 185 1185          1190                1195                1200
1697 Gly Gly Glu Ser Lys Glu Ala
1698                1205
```

VERIFICATION SUMMARY DATE: 08/02/2004
PATENT APPLICATION: **US/09/942,252C** TIME: 15:05:38

Input Set : **A:\09942252Sequence Listing.txt**
Output Set: **N:\CRF4\08022004\I942252C.raw**

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1665 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:16
M:332 Repeated in SeqNo=16